

Work Order ID 51985

September 11, 2009 9:51:05 AM



Page 1

Item ID: D3822-7KGY

Accept



Setup Start



Revision ID: C

Stop



Item Name: Vertical Tunnel, Lower-Grey

Start Date: 09/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 09/21/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *PL W*

Date: *09-9-11*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

100

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

M111807
(2) 1 33 09/15/09
(33 33)

110

0.00



Thermoform

Memo

0.00

Thermoforming Machine




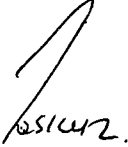

1-Machine Set-Up
2-Pre-heat Tool to required temp.
3-Thermoform as per Dwg and Folio #FTA029 using tool DT9396
Dwg Rev: *3*
Folio Rev: *3*

(2) 1 33 09/15/09
(33 33)
(Pb 7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/9/30	# 110	Found Qty +1 part with Blotter on it RC Humidity in sheet Process / Lack of attention		Scrap and Destroy and Replace M# <u>M111588</u>	 09/09/30	 09/09/30		 09/09/30

NOTE: Date & initial all entries

Work Order ID 51985

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Item ID: D3822-7KGY

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Stop



Item Name: Vertical Tunnel, Lower-Grey

Start Date: 09/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 09/21/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120	QC2- Inspect parts off machine FAI/FAIB	0.00							
-----	---	------	--	--	--	--	--	--	--



QC

Memo

0.00

Quality Control

Visually inspect part for proper formation and texture

2	1	BB	09/23/09
---	---	----	----------

X2

130	QC8- Inspect parts - second check	0.00							
-----	-----------------------------------	------	--	--	--	--	--	--	--



QC

Memo

0.00

Quality Control

2	1	1/2	09/23/09
---	---	-----	----------

(X2)

140		0.00							
-----	--	------	--	--	--	--	--	--	--



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Trim to finished dimensions as per Dwg

2	1		
---	---	--	--

BB 09/23/09

X2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 51985

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Item ID: D3822-7KGY

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Revision ID: C

Item Name: Vertical Tunnel, Lower-Grey

Start Date: 09/11/2009 Start Qty: 1.00

Required Date: 09/21/2009 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

150

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

Complete FAI document

2 1 BB 09/23/09
X2

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

27 50162130

2 4

170

Identify as per dwg & Stock Location: 51/50

0.00



Packaging

Memo

0.00

Packaging

2 4 30 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 51985

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Item ID: D3822-7KGY

Accept

Setup Start

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Stop

Item Name: Vertical Tunnel, Lower-Grey

Start Date: 09/11/2009 Start Qty: 1.00

Cust Item ID:

Required Date: 09/21/2009 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21 - Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

09/10/01
PL 09-10-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 11, 2009 9:51:05 AM

Page 1

Work Order ID: 51985



Parent Item: D3822-7KGYRevC



Parent Item Name: Vertical Tunnel, Lower-Grey

Start Date: 09/11/2009

Required Date: 09/21/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MKYD6185S.080-P3- 52068		Purchased	No			100	sf	907.6732	1.7609			



111807

Kydex steel grey

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

907.6732

111807

907.6732

BB 09/23/09
X2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

DART AEROSPACE LTD		Work Order: 51985
Description: Vertical Tunnel, Lower		Part Number: D3822-7KIV/KGY
Inspection Dwg: D3822	Rev: C	Page 1 of 1

NO. 31985

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <i>N/A</i>				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: *Phigee* Date: 09/22/07

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.20 - 0.15	Min	0.212	✓			
0.060	Min	0.166	✓			
5.9"	±.100	5.93"	✓			

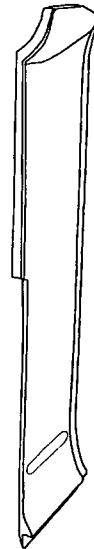
Measured by: *W. L. Leger* Date: 09/23/07 09/02/08
 Audited by: *SA* Date: 09/01/30
 Prototype Approval: N/A Date: N/A

Rev	Date	Change	Revised by	Approved
A	09.07.29	New Issue	KJ	<i>[Signature]</i>

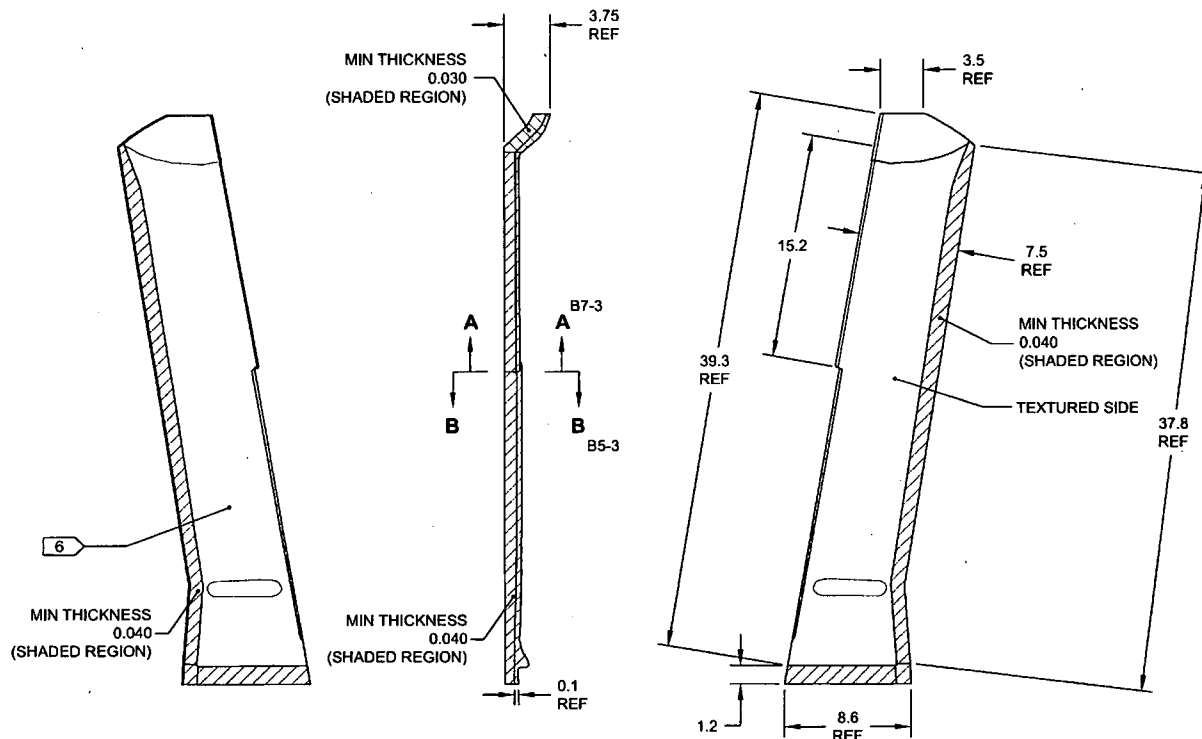
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RETURN TO 2

ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 51985



RELEASED
01/03/12 MP



D3822-1 VERTICAL TUNNEL, LH
(BELL 206 A/B)

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
- 7) WEIGHT: 1.1 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9073 PER DART QSI 022. TRIM PER MOLD.
- 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

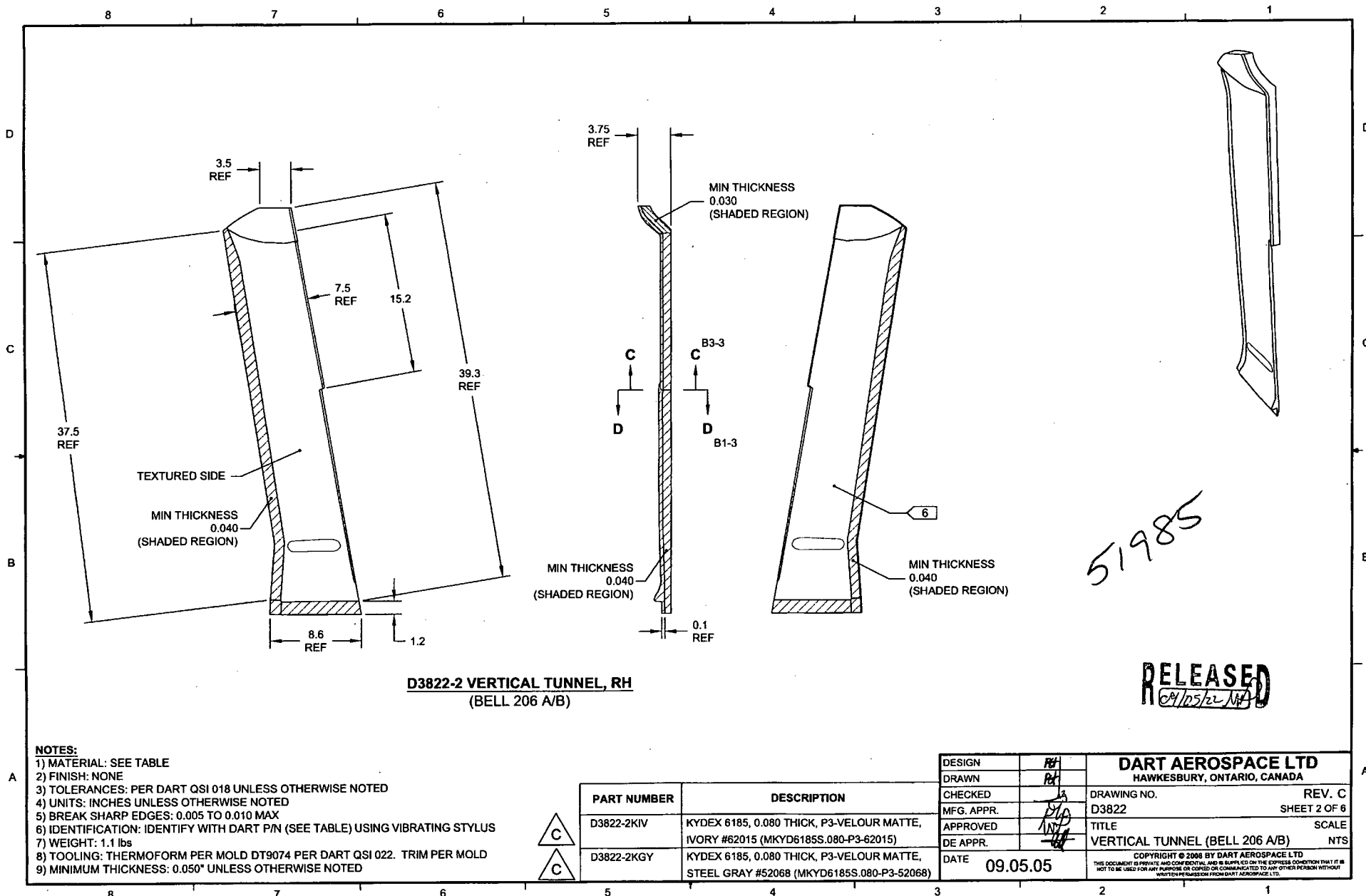
PART NUMBER	DESCRIPTION
D3822-1KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3822-1KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

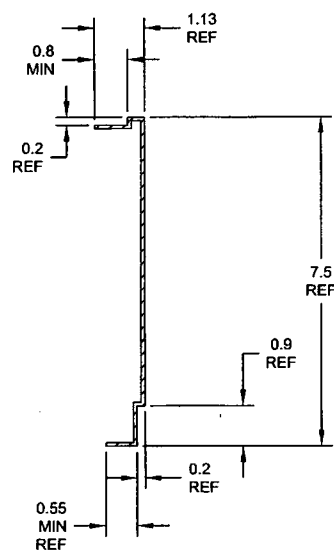
C	ADD STEEL GRAY COLOUR OPTION, ADD IVORY P/N'S D3822-1/-2/-3/-5/-7(KIV) AND ADD STEEL GRAY P/N'S D3822-1/-2/-3/-5/-7(KGY) (ZN A5-1, A5-2, A5-4, A5-5, A5-6)	PH	09.05.05
B	37.8 WAS 38.8 (ZN C8-4); MODIFY TOP OF -3 AND ADD VIEW J (ZN A3-4); INCREASE JOGGLE ON -3 (ZN C6-4); UPDATE VIEW F (ZN A1-4); REASON: TO IMPROVE FIT OF D206-781-151 KIT	PH	09.02.09
A	NEW ISSUE	PH	08.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.05.05		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

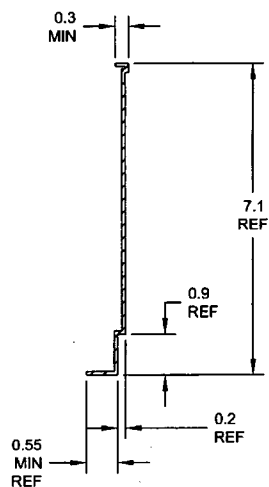
DRAWING NO. REV. C
D3822 SHEET 1 OF 6
TITLE SCALE
VERTICAL TUNNEL (BELL 206 A/B) NTS

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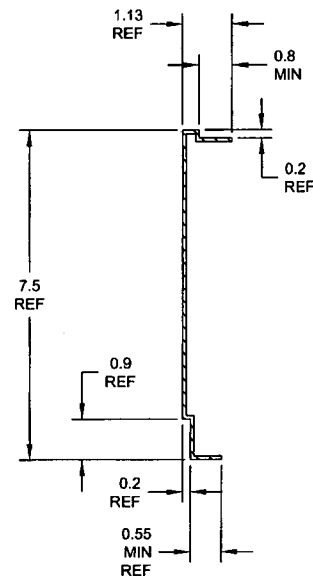




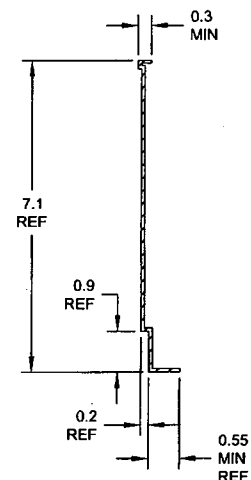
SECTION A-A C6-1



SECTION B-B C6-1



SECTION C-C C4-2

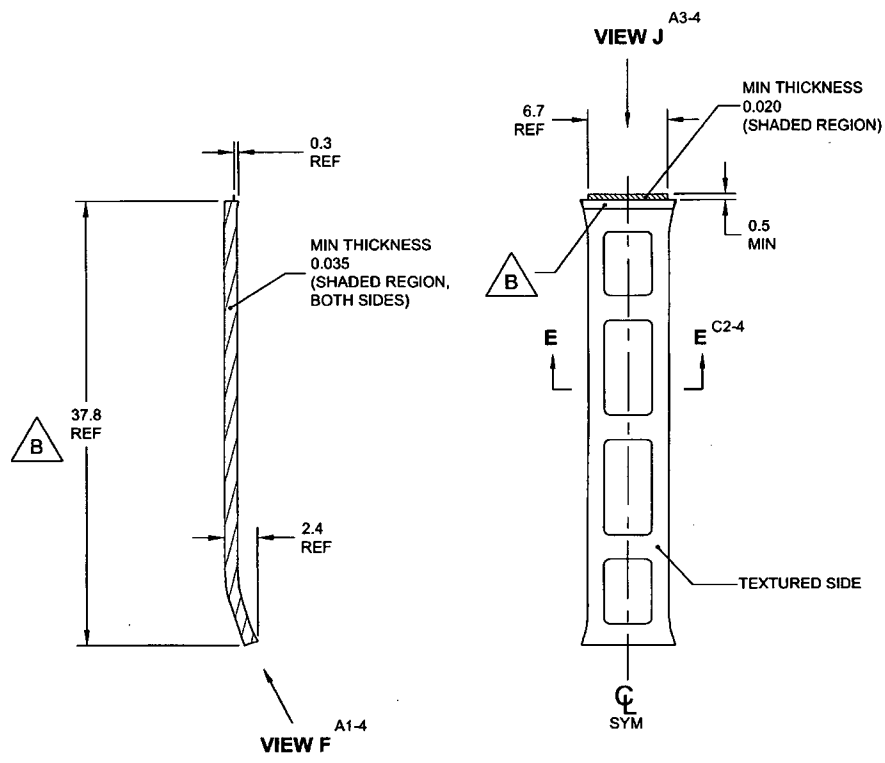


SECTION D-D C4-2

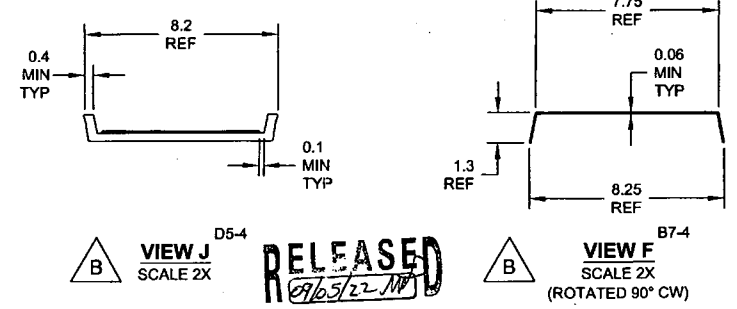
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3822	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		VERTICAL TUNNEL (BELL 206 A/B)	NTS
DATE	09.05.05	COPYRIGHT © 2005 BY DART AEROSPACE LTD	
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51985
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09/05/05

8 7 6 5 4 3 2 1



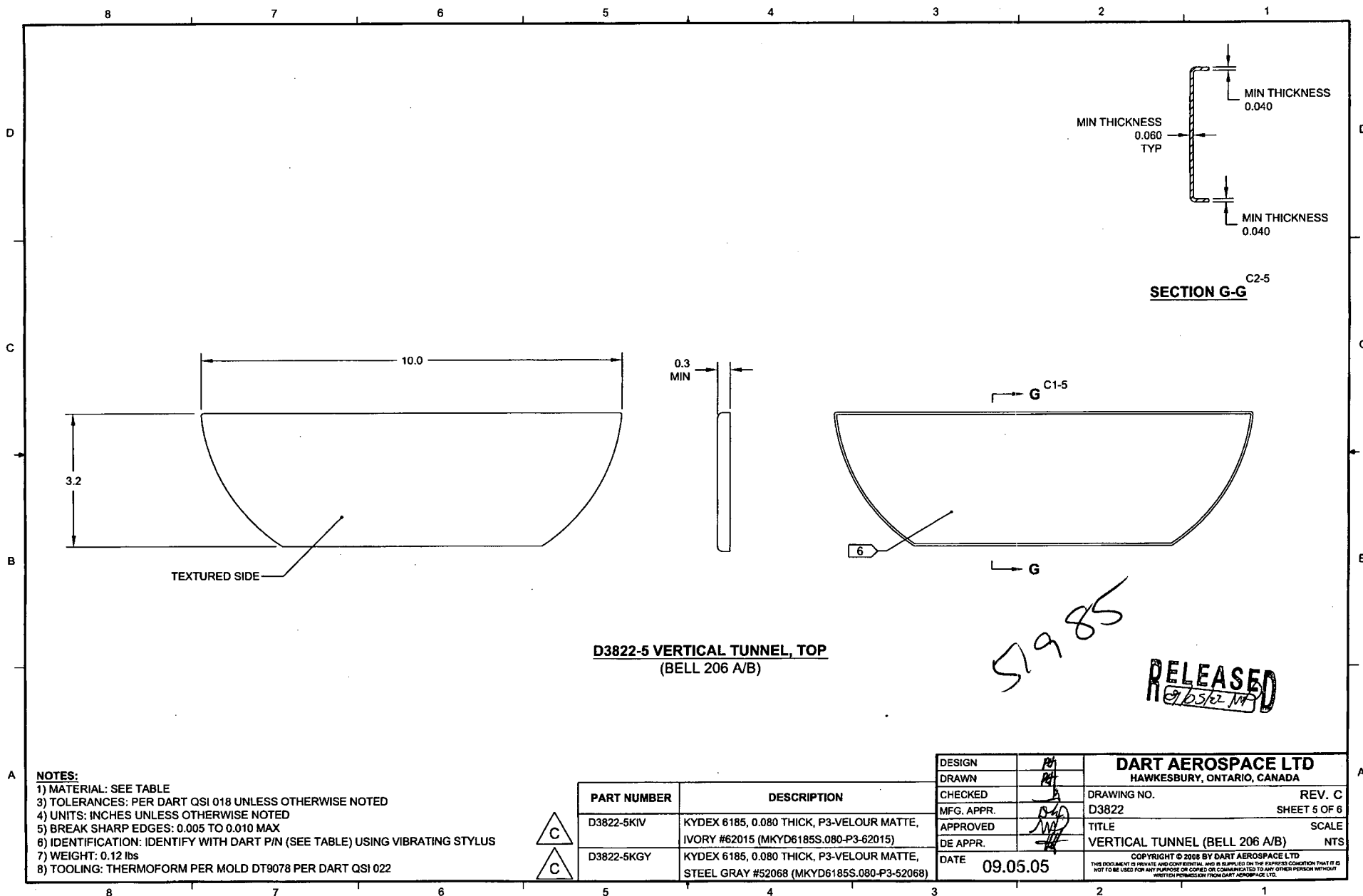
D3822-3 VERTICAL TUNNEL, AFT CENTER
(BELL 206 A/B)



- NOTES:**
- 1) MATERIAL: SEE TABLE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) USING VIBRATING STYLUS
 - 7) WEIGHT: 1.1 lbs
 - 8) TOOLING: THERMOFORM PER MOLD DT9072 PER DART QSI 022. TRIM PER MOLD
 - 9) MINIMUM THICKNESS: 0.050" UNLESS OTHERWISE NOTED

PART NUMBER	DESCRIPTION
D3822-3KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3822-3KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN	RE	DART AEROSPACE LTD	
DRAWN	RE	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3822	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		VERTICAL TUNNEL (BELL 206 A/B)	NTS
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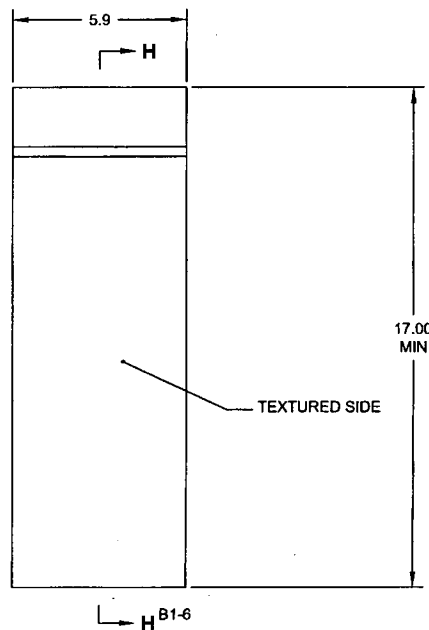
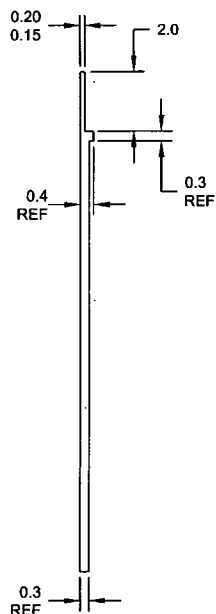
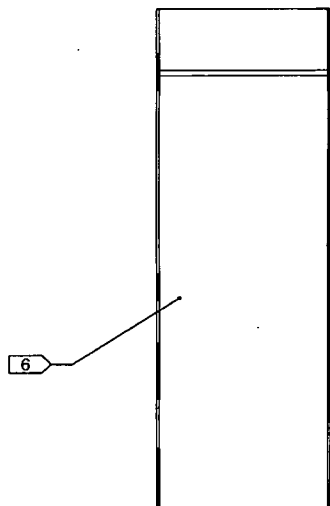
8 7 6 5 4 3 2 1

D

C

B

MIN THICKNESS 0.040 MIN THICKNESS 0.040



TEXTURED SIDE

SECTION H-H B3-6

D3822-7 VERTICAL TUNNEL, LOWER
(BELL 206 A/B)

51985

RELEASED
09/05/22

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N (SEE TABLE) WITH VIBRATING STYLUS
- 7) WEIGHT: 0.36 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9396 PER DART QSI 022
- 9) MINIMUM THICKNESS: 0.060" UNLESS OTHERWISE NOTED



PART NUMBER	DESCRIPTION
D3822-7KIV	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, IVORY #62015 (MKYD6185S.080-P3-62015)
D3822-7KGY	KYDEX 6185, 0.080 THICK, P3-VELOUR MATTE, STEEL GRAY #52068 (MKYD6185S.080-P3-52068)

DESIGN	PA	DART AEROSPACE LTD
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CHECKED		DRAWING NO. REV. C
MFG. APPR.		D3822 SHEET 6 OF 6
APPROVED		TITLE SCALE
DE APPR.		VERTICAL TUNNEL (BELL 206 A/B) NTS
DATE	09.05.05	

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8 7 6 5 4 3 2 1